IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. Serial No.: 10/691,129 Filing Date: October 22, 2003 Applicant: Nicholas Shayne Brookins **Appeal Brief** Examiner: Kent F. Wang Group Art Unit: 2622 Title: IMPROVED VIDEO SURVEILLANCE SYSTEM Attorney Docket No. 4752-000004

BRIEF ON BEHALF OF APPELLANTS

This is an appeal brief in support of an appeal from the action of the Examiner dated November 24, 2008, finally rejecting Claims 1-4, 6-15 and 18-21 of the present application. Copies of the appealed claims are attached as an appendix.

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I. Real Party In Interest

The real party in interest in the present application is SAM Systems Inc., who is the current assignee of the application.

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II. Related Appeals and Interferences

There are no known related appeals or interferences which will directly affect, be directly affected by, or otherwise have a bearing on the Board's decision in the pending appeal.

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III. Status Of Claims

Claims 1-4, 6-15 and 18-21 are pending in the present application. Claims 1-4, 6-15 and 18-21 stand rejected as indicated in the Office Action mailed on November 24, 2008 and are the subject of this appeal.

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IV. Status Of Amendments

No amendments to the claims have been filed subsequent to the final rejection of the pending claims. Pending claims are found in the appendix below.

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V. Summary of Claimed Subject Matter

Applicant's invention relates generally to video surveillance systems and, more particularly, to video surveillance systems having at least some client computing devices configured to retransmit received video data across the network to other client computing devices. Due to various network traffic considerations, it may be desirable to provide alternative sources for providing video data to requesting client computing devices.

Claim 1 is directed to a video transmission system 10. With reference to Figure 1, the system includes: a video source (e.g., cameras 12); a video server 14 adapted to receive video data from the video source, and a video retransmitter 16 residing on a first computing device. The video server 14 is operable to buffer the video data and transmit the video data across a network (e.g., see paragraph [0015]). The video retransmitter 16 is adapted to receive the video data via the network from the video server, to buffer the video data and re-transmit the video data to a second computing device (e.g., see paragraph [0016]). The second computing device is configured to receive the video data from either the video server or the video retransmitter, and can select either the video server or the video retransmitter, and can select either the video server or the video retransmitter as a source for the video data based on a metric associated with the transmission path of the video data from the source (e.g., see paragraphs [0018] – [0021]).

Claim 11 further defines the use of a directory for selecting the source of video data. The video server 14 maintains the directory, where the directory includes a list of client computing devices to whom video data is currently being sent and which are configured to retransmit the video data (see paragraph [0021]). Each entry in the directory identifies a source whose video data is capable of being retransmitted from a

source other than the video server, a network address for the identified source; and an indicator as to whether the video data is being received on a dedicated basis (see paragraph [0021]).

Claim 14 is directed to a method for transmitting video data across a network environment. The method includes: receiving video data at a video server 14 from a digital camera 12 and buffering the video data in a data store residing on the video server 14 (e.g., see paragraph [0015]); transmitting the video data from the video server 14 across a network to a first client computing device 16 (see also paragraph [0015]); buffering the video data in a data store residing on the first client computing device (e.g., see paragraph [0016]); determining by a second client computing device to retrieve the video data from either the video server or the first client computing device by accessing a retransmitter directory residing on the video server (e.g., see paragraphs [0018] – [0021]), where the directory is a list of client computing devices to whom video data is currently being sent and which are configured to retransmit the video data; evaluating a metric associated with each alternative source for the video data being buffered (see paragraph [0020]); and selecting a source for the video data based on said metrics (see paragraph [0021]).

VI. Grounds of Rejection to be Reviewed on Appeal

- I. Whether Claims 1-4, 6-8 and 10-13 are unpatentable over U.S. Patent Application Publication No. 2002/0047916 (Miyagi) in view of U.S. Patent Application Publication No. 2002/0056010 (Lincoln) under §103?
- II. Whether Claims 14, 15 and 18 are unpatentable over U.S. Patent Application Publication No. 2002/0047916 (Miyagi) in view of U.S. Patent Application Publication No. 2002/0056010 (Lincoln) under §103?

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VII. Arguments

I. Rejection of Claims 1-4, 6-8 and 10-13 as being unpatentable over Miyagi in view of Lincoln.

Miyagi is directed generally to a system that enables a user to send an image from a camera or personal computer to a central server. The server may convert the image to a suitable format for use on other types of devices, such as a phone. Any subsequent transmission of the image is directly from the server to a requesting device. Miyagi fails to teach or suggest that a requesting device can receive image data directly from a device other than the central server. In Miyagi, only the central server can retransmit image data. Even if a device could receive image data from a source other than the central server, Miyagi does not teach or suggest that the receiving device can select a source for the image data from amongst two different sources. The Examiner concedes these points but relies upon Lincoln to teach these aspects of applicant's claimed invention.

Lincoln relates to a method and apparatus for transmitting compressed data. With reference to Figure 3, the Examiner maps client 160 to the second computing device of applicant's claimed invention, the original server system 300 to the video server of applicant's claimed invention and the content delivery network 310 to the video retransmitter of applicant's claimed invention. However, Lincoln does not teach or suggest that the client system 160 is able to select either the original server 300 or the content delivery network 310 as a source for the video data. Rather, Lincoln teaches that a request for a file is initially sent to the original server system but is automatically redirected to the content delivery network 310 (see paragraph [0040]). Consequently, the client 160 receives the file directly from the content delivery network 310. In Lincoln, the

client 160 does <u>not</u> receive the file directly from the original server system 300 nor is it able to select receiving the file from the original server system 300 in lieu of content delivery network 310. Selection criteria relates to which edge server 320 is selected from amongst the servers in the content delivery network 310.

The Examiner also appears to rely upon the teaching associated with Figure 5 in Lincoln. In this case, the Examiner maps client 160 to the second computing device of applicant's claimed invention, the server system 100 to the video server of applicant's claimed invention and the proxy system 500 to the video retransmitter of applicant's claimed invention. Likewise, Lincoln does not teach or suggest that the client system 160 is able to select either the server system 100 or the proxy system 500 as a source for the video data. Rather, Lincoln teaches that a request for a file is initially sent to the proxy system which in turn passes the request along to the server system 100 (see paragraph [0050]). Consequently, the client 160 receives the file directly from the proxy system 500. In Lincoln, the client 160 does <u>not</u> receive the file directly from the server system 100. Furthermore, the client 160 is not able to select the source of the file. Thus, Lincoln fails to teach or suggest a second computing device that is operable to select a source for video data from amongst two different sources as recited in applicant's claimed invention.

In contrast, Applicant's invention is directed to a video surveillance system. A video server buffers video data and transmits the video data across a network to various client computing devices. At least some of the client computing devices (referred to as video retransmitters) are configured to retransmit video data across the network to other client computing devices, thereby reducing the bandwidth and computing load placed on the video server. Moreover, a video recipient may "select either the video server or the

video retransmitter as a source for the video data based on a metric associated with the transmission path of the video data from the source" as recited in Claim 1 of the present invention. Neither of the references relied upon by the Examiner nor a combination thereof teach this aspect of the present invention. Therefore, it is respectfully submitted that Claim 1, along with claims depending therefrom, defines patentable subject matter over Miyagi in view of Lincoln. Accordingly, Applicant respectfully requests the Board to reconsider and withdraw these rejections.

II. Rejection of Claim 11 as unpatentable over Miyagi in view of Lincoln.

The Examiner's attention is also drawn to claim 11 which further defines the use of a directory for selecting the source of video data. The video server 14 maintains the directory, where the directory includes a list of client computing devices to whom video data is currently being sent and which are configured to retransmit the video data. This type of directory appears to be absent from the teachings of Miyagi. In particular, Miyagi does not disclose a directory, where the entries provide an indicator as to whether the video data is being received on a dedicated basis. For this additional reason, it is respectfully submitted that Claim 11 defines patentable subject matter over Miyagi in view of Lincoln

III. Rejection of Claims 14, 15 and 18 as being unpatentable over Miyagi in view of Lincoln.

Similar to claim 1, claim 14 is drawn to a method for transmitting video data across a network environment. Of note, claim 14 recites "determining by a second client

computing device to retrieve the video data from either the video server or the first client

computing device by accessing a retransmitter directory residing on the video server" in

combination with other elements of this claim. As discussed above, neither Miyagi or

Lincoln or a combination thereof teach this aspect of the claimed invention. The Examiner

states that this claim differs from claim 1 only in that claim 14 is in method format. The

Examiner ignores that the selection of the source is made by accessing a directory on the

video server. This additional limitation is also absent from the teachings of the relied upon

references. Therefore, it is respectfully submitted that claim 14, along with claims

depending therefrom, defines patentable subject matter over Miyagi in view of Lincoln.

Accordingly, applicants respectfully request the Board to reconsider and withdraw these

rejections.

For the foregoing reasons, the appealed claims are patentably distinguishable over

the art relied upon by the Examiner. Accordingly, Applicant's representative respectfully

requests that this Board reverse the final rejection of Claims 1-4, 6-15 and 18-21.

Respectfully submitted,

Dated: June 24, 2009

/Timothy D. MacIntyre/

Timothy D. MacIntyre Registration No. 42,824

HARNESS, DICKEY & PIERCE P.O.Box 828 Troy, Michigan 48303

(248) 641-1600

TDM/kev

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VIII. Claims Appendix

- 1. A video transmission system, comprising:
 - a video source;

a video server adapted to receive video data from the video source, the video server operable to buffer the video data and transmit the video data across a network; and

a video retransmitter residing on a first computing device and adapted to receive the video data via the network from the video server, said video retransmitter operable to buffer the video data and re-transmit the video data to a second computing device, wherein the second computing device is configured to receive the video data from either the video server or the video retransmitter, and operable to select either the video server or the video retransmitter as a source for the video data based on a metric associated with the transmission path of the video data from the source.

- 2. The video transmission system of Claim 1 wherein the video source is further defined as a digital camera.
- 3. The video transmission system of Claim 1 wherein the video server is integrated with the video source.
- 4. The video transmission system of Claim 1 wherein the second computing device is operable to display the video data.

- 6. The video transmission system of Claim 1 wherein the second computing device is configurable to receive the video data from the selected source.
- 7. The video transmission system of Claim 1 wherein the second computing device is adapted to receive the video data via the network from the video retransmitter.
- 8. The video transmission system of Claim 1 wherein the second computing device is adapted to receive the video data via another network from the video retransmitter.
- 9. The video transmission system of Claim 1 wherein the video server receives the video data at a first resolution and the re-transmitter is operable to re-transmit the video data at a second resolution different from the first resolution.
- 10. The video transmission system of Claim 1 wherein the video server is operable to maintain a directory, where the directory includes a list of client computing devices to whom video data is currently being sent and which are configured to retransmit the video data.
- 11. The video transmission system of Claim 10 wherein each entry in the directory identifies a source whose video data is capable of being retransmitted from a source other than the video server, a network address for the identified source; and an

indicator as to whether the video data is being received on a dedicated basis.

- 12. The video transmission system of Claim 10 wherein the video server is adapted to receive requests for the video data and operable to log an entry into the directory when the requesting computing device is configured to retransmit the video data.
- 13. The video transmission system of Claim 10 wherein said directory is accessible to the second computing device, the second computing device being operable to evaluate each alternative source for the video data being requested; and selecting a source for the video data based on a metric associated with the transmission path of the video data from the source.

14. A method for transmitting video data across a network environment, comprising:

receiving video data at a video server from a digital camera and buffering the video data in a data store residing on the video server;

transmitting the video data from the video server across a network to a first client computing device;

buffering the video data in a data store residing on the first client computing device;

determining by a second client computing device to retrieve the video data from either the video server or the first client computing device by accessing a retransmitter directory residing on the video server, where the directory is a list of client computing devices to whom video data is currently being sent and which are configured to retransmit the video data;

evaluating a metric associated with each alternative source for the video data being buffered; and

selecting a source for the video data based on said metrics.

15. The method of Claim 14 wherein the step of transmitting the video data from the video server further comprises:

receiving a request for the video data from the first client computing device;

determining whether the first client computing device is configured to

retransmit the video data; and

logging an entry in a retransmitter directory when the first client computing

device is configured to retransmit the video data.

- 18. The method of Claim 14 wherein the metric is associated with a transmission path of the video data from the evaluated source.
- 19. The method of Claim 14 wherein the step of buffering the video data further comprises periodically reassessing whether the video data may be retrieved from an alternative data source.
- 20. The method of Claim 14 wherein the step of transmitting the video data from the video server further comprises transmitting the video data from the video server at a resolution different than a resolution of the video data received at the video server.
- 21. The method of Claim 14 wherein the step of retransmitting the video data from the first client computing device further comprises transmitting the video data at a resolution different than a resolution of the video data received at the first client computing device.

IX. Evidence Appendix

None

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X. Related Proceedings Appendix

None

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